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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,699	03/07/2002	Steven P. Spagnuolo	TRW(M)5964	2501

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EXAMINER

DUNN, DAVID R

ART UNIT PAPER NUMBER

3616

DATE MAILED: 09/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/092,699

Applicant(s)

SPAGNUOLO ET AL.

Examiner

David Dunn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 15-17 and 22-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-37 is/are allowed.
- 6) ☒ Claim(s) 15-17, 22, 26 and 27 is/are rejected.
- 7) ☒ Claim(s) 23-25 and 28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

This Office Action is responsive to the amendment filed 8/14/03 in which claims 1-14 and 18-21 were canceled and claims 22-37 were added.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 22, 26, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Kato et al. (6,298,962).

Kato et al. discloses a linkage member (201; see Figure 12A) comprising: a shank (202) extending axially along a first axis, said shank having a first portion with a first outer surface that extends entirely around a circumference of said shank and is centered on said first axis; said shank including a narrowed second portion (207) at a predetermined location along said first axis, said narrowed second portion having a cross-sectional area less than a cross-sectional area of said first portion, said shank adapted to buckle at said narrowed second portion under a predetermined axial load (see for example, Abstract, etc.), said narrowed second portion of said shank including a second outer surface that extends entirely around circumference of said shank and is located entirely within a projection of said cross-sectional area of said first portion (see

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Figure 12C; the circumference of 207 is entirely within that of 202, that is, it does not extend outside of the circumference of 202), said narrowed second portion being centered on a second axis that is offset relative to said first axis (see Figure 12C; the center of portion 207 is offset from that of 202). The axis of 207 extends parallel to that of 202. The portion of 207 extends straight along the second axis parallel to the first axis.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sukigara et al. (6,234,704) in view of Kato et al. (6,298,962).

Sukigara et al. discloses a vehicle steering linkage (see column 1, lines 1-5) member comprising: a socket (2; see Figure 2); and a stud (10) having a ball end portion (11) received in the socket and supported for pivotal movement relative to said socket, said stud having a longitudinal axis, said stud having a shank portion (12) projecting from the socket and centered on the axis; said shank portion of the ball stud including a predetermined weakened portion (15), said predetermined weakened portion buckling under a predetermined amount of force (see for example, column 5, lines 50-60).

Sukigara et al. fails to the weakened portion being not centered on the longitudinal axis of the stud.

Kato et al. discloses a linkage member (see Figure 5A) comprising: a shank (101) including a relief area (107) at a predetermined locating along the longitudinal axis, said shank buckling (see for example, Abstract, etc.) at the relief area under a predetermined amount of axially applied force, said shank at the relief area having a cross-sectional configuration that is not centered on the axis (see Fig. 5C and 6B). Also, see Figure 7A, the cross-section configuration of relief 108 is lower than the longitudinal axis of the shank 102.

As seen in Figures 5B & 5C, the cross sectionals are circular. The weakened portion is eccentric by a distance greater than the maximum bending amount in the shank.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sukigara et al. with the teachings of Kato et al. in order to provide the weakened portion with a simpler and cheaper construction; it is also noted that both references show equivalents known for the same purpose.

#### *Allowable Subject Matter*

5. Claims 29-37 are allowed.
6. Claims 23-25 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. The following is a statement of reasons for the indication of allowable subject matter: the main reason of the allowance of claims 23 and 29 is the inclusion of the limitation that the second outer surface which is offset is "cylindrical". While Kato et al (as discussed in the 102 rejection above) and Baker et al. (5,853,194) show an offset portion, but the offset portion does

not include a "cylindrical outer surface" as in both cases the offset weakened portion is part of a curvature and does not include any sort of cylindrical surface. The examiner also agrees with the analysis of applicant regarding claim 29 and the references of Sukigara et al. and Haldric et al. on page 14. Regarding claim 34, the examiner agrees with the remarks of applicant on page 15: the prior art fails to show the first and second transition portions having different distances.

### *Response to Arguments*

8. Applicant's arguments filed 8/14/03 have been fully considered but they are not persuasive.

On pages 9-10, applicant argues the 103 rejection of claim 15. Applicant argues the motivation that the weakened portion of Kato et al. would be cheaper and simpler to construct. Applicant also requests an affidavit of the Examiner if the "Examiner has personal knowledge". In response, the Examiner is not relying on personal knowledge, but rather the common knowledge available to one of ordinary skill in the art. Regarding the motivation that the construct of Kato et al. would be cheaper, it is submitted that this construction would be simpler and cheaper if one making the link had the equipment to make the portion using this method and did not have the equipment to make it as taught by Sukigara et al. Additionally, it is noted that these methods are known equivalents of constructing a weakened portion of a link in a vehicle, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any known equivalent. See MPEP 2144.06. An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. *In re Fout*, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). It is also noted there are many known

equivalents for solving this problem as shown by the various different embodiments disclosed throughout Kato et al.

Additionally, applicant argues that neither reference “teaches or suggests that the weakened portion of Kato et al. would be simpler or cheaper to manufacture than the furrowed portion of Sukigara et al.” It is not necessary that the references actually suggest, expressly or in so many words, the changes that applicant has made. The test for combining references is what the references as a whole would have suggested to one of ordinary skill in the art. In re Sheckler, 168 USPQ 716 (CCPA 1971); In re McLaughlin 170 USPQ 209 (CCPA 197); In re Young 159 USPQ 725 (CCPA 1968).

On pages 10-12, applicant argues the newly added claim 22. In response it is submitted that on page 12, applicant argues the embodiment of Figures 8A-8C of Kato, however, the examiner has based the rejection above on the embodiment of Figures 12A-12C which does show the offset surface being within the outer circumference (see rejection above for more detailed explanation.)

### *Conclusion*

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

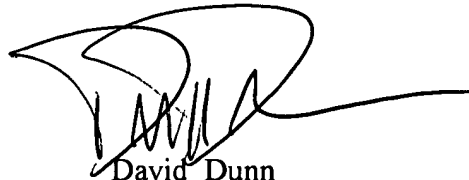
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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Dunn whose telephone number is 703-305-0049. The examiner can normally be reached on Mon-Thur, alt. Fridays, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-1113.

A handwritten signature in black ink, appearing to read 'David Dunn', with a long horizontal line extending to the right.

David Dunn  
Examiner  
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